

# AE-241/242 Outdoor Enclosure

Installation Guide



Rev. 1.0

Ordering part no.:  
900025400G AE-241\_V01  
900025500G AE-242\_V01

Document part no.: 625030600G

**CAUTION:**  
TO REDUCE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT REMOVE COVER.  
NO USER SERVICEABLE PARTS INSIDE.  
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

**UNPACKING:**  
Unpack carefully. Electronic components can be damaged if improperly handled or dropped. If an item appears damaged in shipment, place it properly in its carton and notify the shipper.



**IMPORTANT!:**

1. Read and follow Instructions: All operating and user instructions should be read and followed before the unit is to be operated.
2. Electrical Connections: Only a qualified electrician is allowed to make electrical connections.

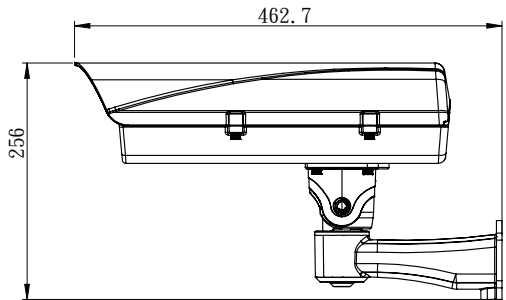
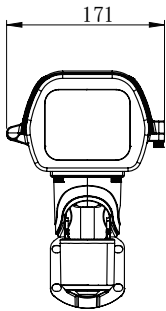
## **I Specifications**

Model Number	AE-241/242 enclosure
Power Input	30W or 60W PoE
Window heater	Always ON
Heater Control	15°C (ON) / 25°C (OFF)
Blower Control	35°C (ON) / 25°C (OFF)
Environmental Operation Temp.	AE-241 Single heater: -20°C ~ +50°C AE-242 Double heater: -40°C ~ +50°C (heater is on at -40°C. When temperature reaches -10°C, camera is powered on)
Protection Level	IP66, IK10
Temper Glass thickness	4mm
Mounting Bracket	Fully-cable Management
Construction	Die-cast Aluminum Alloy
Coating	White epoxy powder coating
Dimensions	400 (L) x 130 (W) x 108 (H) mm
Net Weight	2800g

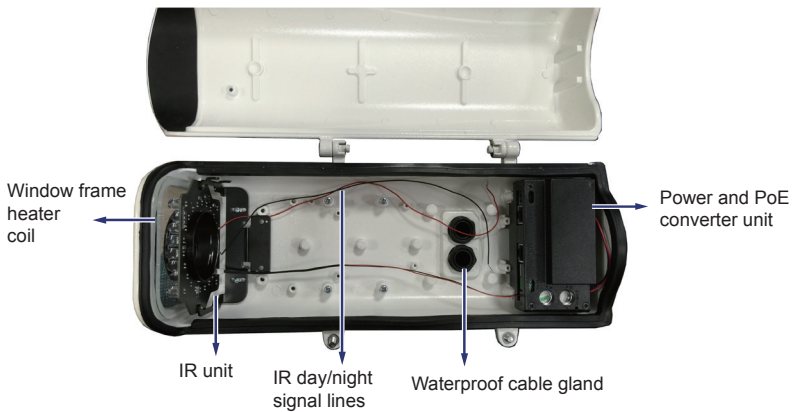
IR light angle of beam (different IR light units)	15°
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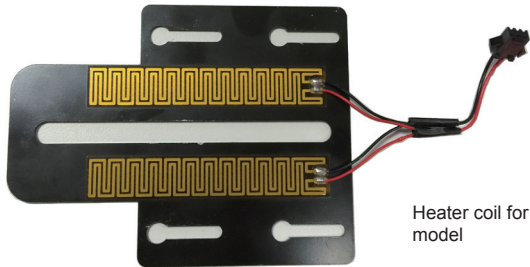
## II Mounting Configuration & Dimensions

### Swivel Positions and Directions



## III Component Description





Heater coil for the dual-heater, AE-242 -40°C model

## IV Installation Suggestions

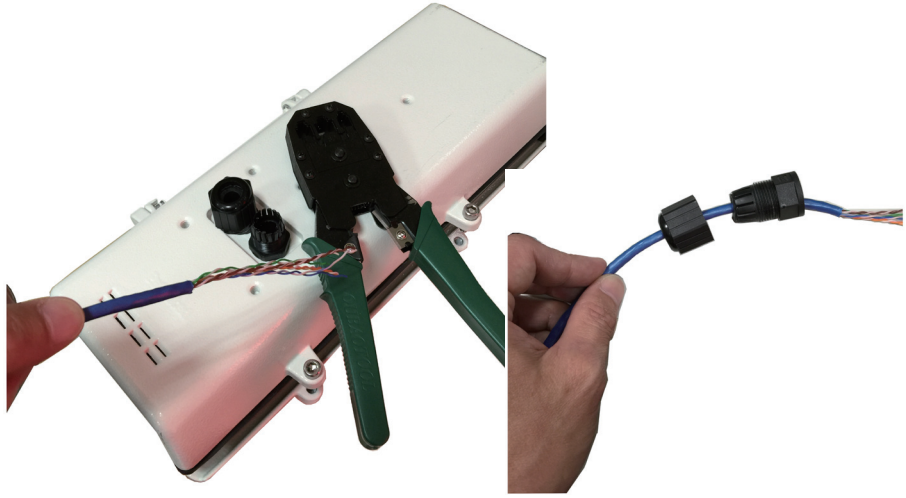
If you plan to install this camera enclosure into a tropical, sea coastal, or an environment where salt water or corrosive industrial waste water/moist are present, please seal each stainless steel screws and fittings with a silicon grease compounds. This will help prevent electrolysis to occur and extend the life span of the camera and housing.

**⚠ IMPORTANT:**

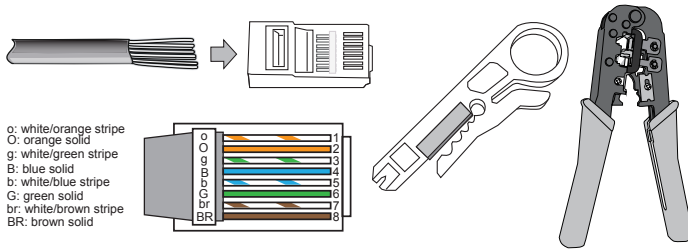
1. Disconnect devices: A readily accessible disconnect device in the building installation wiring should be incorporated.
2. Electrical Connection: Only a qualified electrician is allowed to make electrical connections.

## V Installation

1. Prepare a CAT5e Ethernet cable. Pass it through the waterproof connectors.



You may need to remove the RJ45 connector, and use a crimping tool to connect the Ethernet wires to an RJ45 connector inside the enclosure. Use an Ethernet cable of the width of 5 ~ 6.5mm.



**2.** When done, tighten up the waterproof connectors.



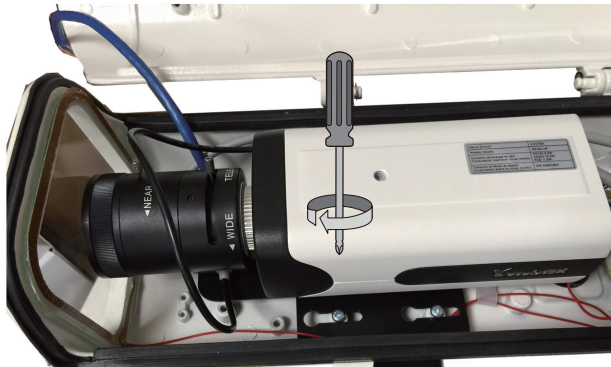
3. Assemble the camera components, e.g., the CS ring and lens module. Align the buffer pad with the mounting hole at the bottom of the camera (the label side).



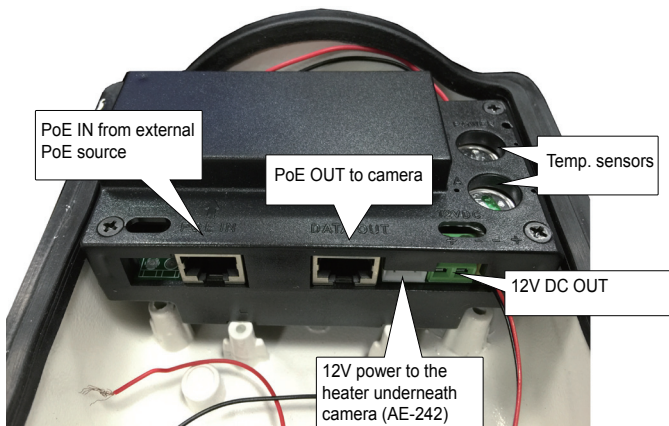
4. Place the mounting plate on top of the buffer pad and then secure it to the camera. You may need adjust its position so that the lens module can flush align with the tempered glass.



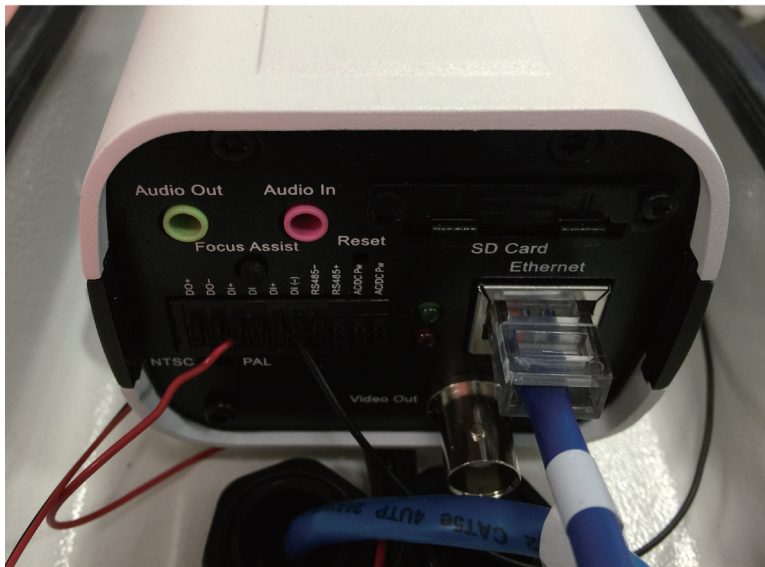
5. Secure the camera to the enclosure by securing screws through the keyhole slots.



**6.** Connect PoE input to the power unit. Connect a short Ethernet cable between the PoE output and the Ethernet port on the camera. If using the dual-heater AE-242, connect the two-pin header to the 12V output on the PSU unit.



**7.** Connect the day/night signal lines from the IR unit to the DI connectors on the camera's terminal block.



The day/night mode DI connection enables the synchronization of IR light and the automated day/night switching mechanism on the camera.

8. Having the wiring done inside the enclosure, you can install the enclosure bracket to a preferred location at your installation site. Drill mounting holes and a cable routing hole (if preferred) on a wall. Install the bracket.



9. Lift the whole enclosure up to the installation position, and pass the Ethernet cable through the bracket.

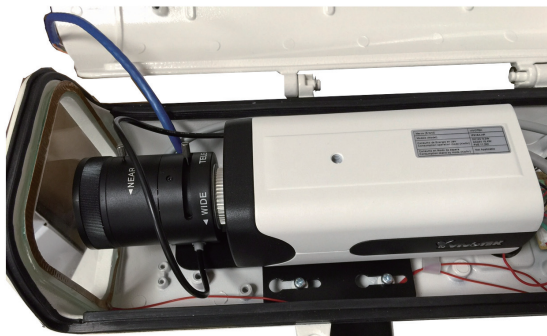




**10.** Mount the enclosure on to the installed bracket, and secure the connection by tightening the 4 socket screws. Due to the weight of the enclosure, it is best to have two men mounting the enclosure.



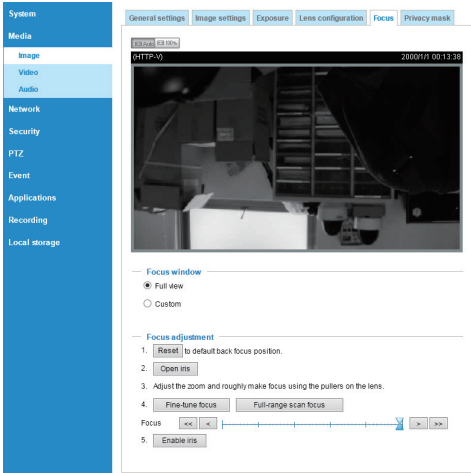
**11.** Adjust zoom and focus and open a web session with the camera to tune for the best image. When zoom and focus is done, Close the top cover and fasten the top cover screws.



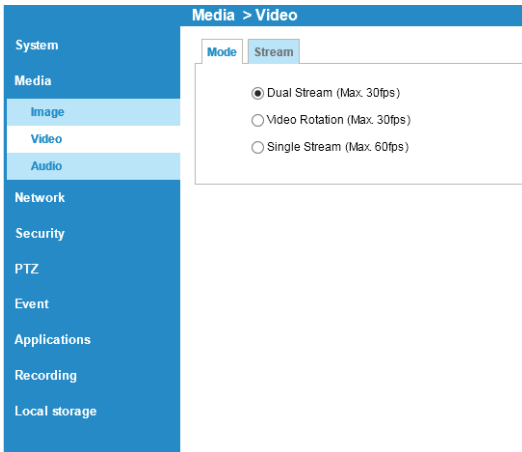
## 12. Firmware configurable options:

Open a web console with the camera.

Use the Media > Focus function to tune for a best image focus on your target area.



If preferred, e.g., shooting fast moving vehicles, select the 60fps frame rate.



Make sure that external IR is turned on in the night mode, and that the IR cut filter option is synchronized with the digital input you connected.

The screenshot shows the 'Media > Image' settings page. The left sidebar contains menu items: System, Media, Image, Video, Audio, Network, Security, PTZ, Event, Applications, Recording, and Local storage. The main content area is divided into 'Video settings' and 'Day/Night settings'.

**Video settings:**

- Show timestamp and video title in video and snapshots
- Video title: [Text input field]
- Position of timestamp and video title on image: Top
- Timestamp and video title font-size: Small
- Color:  BW  Color
- Power line frequency:  50 Hz  60 Hz
- Video orientation:  Flip  Mirror
- Rotate

**Day/Night settings:**

- Switch to BW in night mode
- Turn on external IR illuminator in night mode
- IR cut filter: Auto mode
- Light sensor sensitivity: Normal

A 'Save' button is located at the bottom right of the settings area.

A zoomed-in view of the 'IR cut filter' dropdown menu is shown below, with the following options:

- Auto mode
- Day mode
- Night mode
- Synchronize with digital input 1
- Synchronize with digital input 2
- Synchronize with digital input 3
- Schedule mode

In the night mode, check if the input signals are correctly detected. You may simulate the night mode by blocking the IR unit's light sensor. Change the triggering parameters when necessary.

The screenshot shows the 'Applications > DI and DO' settings page. The left sidebar contains menu items: System, Media, Network, Security, PTZ, Event, Applications, Motion detection, DI and DO, Tampering detection, Audio detection, Package management, Recording, and Local storage. The main content area is divided into 'Digital input 1', 'Digital input 2', 'Digital input 3', and 'Digital output'.

**Digital input 1:**

- Normal status:  High  Low
- Current status: High

**Digital input 2:**

- Normal status:  High  Low
- Current status: High

**Digital input 3:**

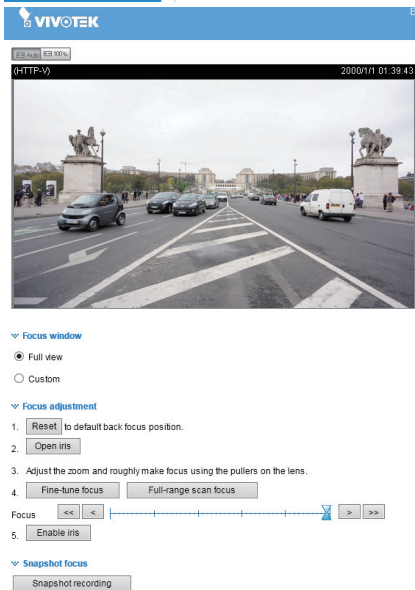
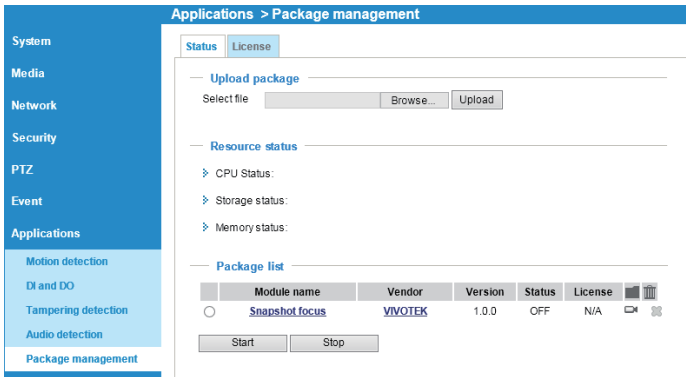
- Normal status:  High  Low
- Current status: High

**Digital output:**

- Normal status:  Open  Grounded
- Current status: Open

A 'Save' button is located at the bottom right of the settings area.

If your target area is a stretched out field of view, such as shooting a part of a highway, finding the best focus can be a problem. You can use the Snapshot Focus utility to make sure you acquire clear images of the license plates of passing vehicles.



### Operation Procedure:

1. Press the Snapshot Recording button, e.g., when a car is passing the field of view. A short, 2.5 seconds of video recording will be available (including 1 second of pre-recording and another second of post-recording).
2. The recording takes place on Stream 1 with a focusing result calculated from the full of the current field of view.
3. The Snapshot Focus comes with an embedded Quick time player. Users can review the current focusing results on a viewing window. Users can also use **the left arrow key** on their keyboard to go through the recording in a frame-by-frame manner (after the video is played once).  
  
In this way, an installer can immediately examine whether the focus is optimal when a fast going car is captured by video. If not, he can tune the focus again and review the imaging result until satisfied.
4. Users can also download the short recording clip to a PC. Note that if the Snapshot Focus page is refreshed or the web session is closed, the recording will be erased.

12 Note that you can use the arrow buttons on the sides of the Focus tuning bar to find the best focus.